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EXAMINER	
SALTARELLI, DOMINIC D	
ART UNIT	**PAPER NUMBER**
2623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/600,447	FILISAN, ANDREA POLO	
	Examiner	Art Unit	
	Dominic D. Saltarelli	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-8,12-49 and 54-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-8,12-49 and 54-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 26, 2006 has been entered.

Response to Arguments

2. Applicant's arguments filed May 26, 2006 have been fully considered but they are not persuasive.

First applicant argues that Nicholson does not teach distributing signals in a frequency band that is receivable by all users (applicant's remarks, page 15, third paragraph). Next applicant argues that Hoarty does not teach a direct correspondence between person channels and sockets as claimed (applicant's remarks, page 16, fifth paragraph).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the claimed limitation of distributing signals in a frequency band that is receivable by all users is in fact taught by

Hoarty and the claimed correspondence between person channels and sockets is taught by Nicholson.

Second, applicant argues that the combination of the Nicholson and Hoarty references results in a system different than the claimed invention by asserting that both reserved and non-reserved signals would be received at the socket over the reserved channel (applicant's remarks, page 17, third paragraph).

In response to applicant's argument that "A CATV system according to Hoarty would provide broadcast and interactive services on the same cable. A system according to Nicholson would receive the CATV service and distribute it to the user by converting all of the received signals into the user's respective personal channels.", the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the distribution system of Nicholson is modified in view of Hoarty to provide publicly accessible channels in addition to the private channel, separating the two signals using a basic filter arrangement taught by Schubin.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 5-8, 12-24, and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson (4,901,367, of record) in view of Hoarty et al. (5,485,197, of record) [Hoarty] and Schubin et al. (3,936,594) [Schubin].

Regarding claims 1 and 55, Nicholson discloses a system (fig. 1) for distribution (col. 1, lines 19-40) of information signals (from the different program sources 40, col. 4, lines 30-42) to a plurality of sockets (the socket being the access point of the office terminal shown in fig. 3), said information signals being reserved signals intended for reception by predetermined sockets (col. 1, lines 18-24, col. 2, lines 51-60, and col. 5, lines 2-25), comprising:

receiving means for receiving said information signals (fig. 5, program sources include local broadcasts, satellite programming, and pay-per-view programming, thus the receiving means include a cable and/or antenna receiver in addition to a satellite receiver);

converting means operatively connected to said receiving means for frequency converting the reserved signals for allocation among a plurality of channels with a band of reserved frequencies, each of said channels being a

personal channel only receivable at one of said predetermined sockets in response to control signals received from said one of said predetermined sockets (RSPC 2 in fig. 3, which demodulate then remodulate signals from broadcast source onto personal channels in response to control signals sent upstream from users, col. 4, lines 30-42);

mixing means (fig. 2, combiner 21) operatively connected to said receiving means and to said converting means;

a distribution cable operatively connected between said mixing means and each of said plurality of sockets (fig. 3, distribution cable 3), said mixing means distributing said reserved signals to said plurality of sockets over said distribution cable (col. 4, lines 30-42);

Nicholson fails to disclose only a portion of said information signals are reserved information signals and the remaining portion are non-reserved information signals and band-stop filter means operatively connected to said distribution cable for blocking all of said reserved signals, and band-pass filter means operatively connected in parallel with said band-stop filter means, for passing to each socket only those blocked reserved signals intended for reception thereat.

In an analogous art, Hoarty teaches a video distribution system (col. 5, lines 15-45) wherein there is provided to subscribers a combined signal comprising a first portion of reserved signals and a second portion of non-reserved signals (the provided interactive services, called "interactive channels"

and "virtual channels" are reserved digital signals while the conventional cable broadcast channels, or "non-interactive services" are the nonreserved signals, col. 7, line 11 – col. 8 line 49), providing the benefit of conventional broadcast programming to all subscribers in addition to interactive and on-demand services (col. 7, lines 11-35).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson to include a combined signal comprising a first portion of the reserved information signals and a second portion of non-reserved information signals, as taught by Hoarty, for the benefit of providing conventional freely available broadcast programming to all subscribers in addition to the reserved signals.

Nicholson and Hoarty fail to disclose band-stop filter means operatively connected to said distribution cable for blocking all of said reserved signals, and band-pass filter means operatively connected in parallel with said band-stop filter means, for passing to each socket only those blocked reserved signals intended for reception thereat.

In an analogous art, Schubin teaches that is it quite old and well known in the art to use band-pass and band-stop filters in parallel to separate two signals out from a single composite signal (col. 6, lines 50-59).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson and Hoarty to include a band-pass and band-stop filter in parallel to separate signals, as taught by Schubin, as

the band stop-filter would prevent just the reserved band from passing through and allow the non-reserved signals, taught by Hoarty, through to the socket and the band-pass filter would allow through just the single reserved channel with it's reserved information signal, taught by Nicholson, to the socket.

Regarding claims 54 and 56, Nicholson, Hoarty, and Schubin disclose the system of claims 1 and 55, wherein the information signals are digital (Hoarty, col. 7, lines 36-65).

Regarding claims 2, 6, and 57, Nicholson, Hoarty, and Schubin disclose the system of claims 1, 54, and 55, wherein the reserved signals present in each personal channel are Quadrature Amplitude Modulation (QAM) signals (Hoarty, col. 8, lines 15-18).

Regarding claims 5, 7, and 8, Nicholson, Hoarty, and Schubin disclose the system of claim 1, but fail to disclose each personal channel is 8 MHz wide and the personal channels are contained in a frequency band between 230-445 MHz.

The assignment of bandwidth for a personal channel bandwidth and the frequencies at which the personal channel is resident are at the discretion of the designer but limited by the transmission medium, FCC regulations, and the amount of data to transmit from one point to another.

It would have been obvious at the time to a person of ordinary skill in the art to limit the personal channel to 8 MHz wide, as this would allow more personal channels to be carried over the distribution network (as Nicholson originally teaches using 12 MHz wide channels, as the bandwidth filter 23 used for isolating a personal channel is a 12 MHz bandwidth filter), and placing said personal channel in the 230-445 MHz range is beneficial for the lower attenuation experienced by signals placed in said range as opposed to placing them in higher frequency ranges.

Regarding claim 12, Nicholson, Hoarty, and Schubin disclose the system of claim 54, further comprising a plurality of return channel modules respectively operatively connected to said predetermined signal sockets for exchanging signals on a return channel in order to select the reserved signal the frequency of which are to be converted into a personal channel (Nicholson teaches a "user's assigned transmit channel", col. 5, lines 14-25, used for sending signals upstream which select the signals to place on the reserved frequency band of that user's RSPC, col. 4, lines 43-66).

Regarding claims 13-17, Nicholson, Hoarty, and Schubin disclose the system of claim 12, but fail to disclose the return channel is FSK, PSK, QPSK, or QAM modulated, or bi-directional under TDMA procedure.

FSK, PSK, QPSK, and QAM modulation, and TDMA multiplexing are all notoriously well known in the art as methods for transmission of digital data, each having particular benefits associated with each.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, and Schubin to modulate the return channel using FSK, PSK, QPSK, or QAM procedures or bi-directional under TDMA procedure, as each has particular advantages associated with each, such as the robustness (resistance to noise) of QPSK modulation, or the transmission efficiency (high bit rate) of QAM, or the bandwidth conservation of TDMA (which allows multiple digital channels to be multiplexed onto a single physical channel).

Regarding claim 18, Nicholson, Hoarty, and Schubin disclose the system of claim 12, but fail to disclose the return channel has a bandwidth of 128 KHz.

It is notoriously well known in the art to designate return channel bandwidth as 128 kHz bands, as this is a part of the DVB-RC (digital video broadcasting-return channel) standard.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, and Schubin to limit the return channel bandwidth to 128 KHz so as to conform to the DVC-RC standard, an established and agreed upon standard for transmitting digital video,

assuring hardware compliance among devices in a system, thus alleviating the need for specialized, custom equipment.

Regarding claim 19, Nicholson, Hoarty, and Schubin disclose the system of claim 12, but fail to disclose the return channel is between 41 and 46.5 MHz.

The official notice taken that it is notoriously well known to place return channels in the 5-50 MHz range, as frequencies beyond this range are utilized for higher bandwidth, downstream communications, was not traversed by the applicant, and is thus taken as and admission of the fact presented.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, and Schubin to place the return channel between 41 and 46.5MHz, as it is conventional to place return channels in cable distribution networks in the 5-50 MHz range.

Regarding claim 20, Nicholson, Hoarty, and Schubin disclose the system of claim 12, wherein the return channel is provided on said distribution cable (Nicholson, col. 5, lines 14-25).

Regarding claim 21, Nicholson, Hoarty, and Schubin disclose the system of claim 12, wherein the return channel module used by a user is not accessible to all other users of the system (Nicholson teaches return channels are assigned to particular users for exclusive use, col. 5, lines 20-23 and col. 1, lines 22-24).

Regarding claim 22, Nicholson, Hoarty, and Schubin disclose the system of claim 12, wherein the return channel is radio frequency irradiated (Nicholson teaches upstream information is radio frequency modulated signals transmitted over the user allocated transmit channel, col. 5, lines 51-55).

Regarding claim 23, Nicholson, Hoarty, and Schubin disclose the system of claim 1, wherein the converting means comprises a transmodulator (Nicholson, RSPC 3 in fig. 3, col. 4 line 59 – col. 5 line 13).

Regarding claim 24, Nicholson, Hoarty, and Schubin disclose the system of claim 1, wherein Nicholson discloses a user terminal (fig. 4, office terminal 4) and an IRD receiver-decoder (fig. 4, TV receiver 25) operatively connected to each socket, and remote control means adapted to operate said user terminal and an IRD receiver-decoder (fig. 4, remote control unit 33, controls all communications, both video which is received by receiver 25 and data which is receiver by modem 26 in the office terminal 4, col. 5 lines 14-25 and col. 6 lines 19-36).

Regarding claim 56, Nicholson, Hoarty, and Schubin disclose the system of claim 58, but fail to disclose recovering the bit error rate.

Examiner takes official notice that recovering the bit error rate in digital communications is notoriously well known in the art, as it is an established and conventional practice for maintaining the integrity of digital communications.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, and Schubin to recover the bit error rate, for the benefit of maintaining the integrity of digital communications over the network.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson, Hoarty, and Schubin as applied to claim 1 above, and further in view of Macdonald et al. (5,835,128, of record) [Macdonald].

Regarding claim 4, Nicholson, Hoarty, and Schubin disclose the system of claim 1, but fail to disclose the distribution network comprises MMDS or LMDS networks.

In an analogous art, Macdonald teaches a video distribution system wherein video signals are redistributed via wireless MMDS or LMDS networks (col. 4, lines 5-18), wherein wireless video distribution is free from geographic limitations and do not require any special medium for transmission of signals.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, and Schubin to utilize MMDS or LMDS networks for the distribution of information signals, as taught by Macdonald, for the benefit of free distribution of signals without regard to

geographic limitations and without relying on costly cables or wiring which is subject to wear and breakage.

6. Claims 25-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson, Hoarty, and Schubin as applied to claim 1 above, and further in view of Hamlin (5,574,964, of record).

Regarding claim 25, Nicholson, Hoarty, and Schubin disclose the system of claim 1, but fail to disclose said converting means comprises a single transmodulator device having two or more means for frequency converting one or more of the received digital signals into personal channels.

In an analogous art, Hamlin teaches placing the components for receiving and remodulating signals of different transmission formats into a sole transmodulator device (fig. 2 contains the demodulation and remodulation devices all within converter 34, col. 3, lines 24-54), for an economic means to transmodulate multiple received signals in a modular fashion (only the demodulation portions need to be added when upgrading the system, col. 3, lines 47-54).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, and Schubin to place the plural selection means within a single transmodulator device, as taught by Hamlin, for the benefit of maintaining the modularity of the system in an economic fashion (only the receiving and demodulation portions need to be

added to expand the system, output hardware is shared and does not need to be duplicated when expanding the system).

Regarding claims 26 and 27, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 25, wherein said transmodulator device comprises plural tuner means adapted to perform the selection of reserved signals within at least two frequency ranges (Nicholson, fig. 3, tuner 16, wherein there is one tuner per customer as there is one RSPC per customer, col. 4, lines 30-42), and plural demodulation means adapted to demodulate at least two of said digital signals (Nicholson, fig. 3, demodulator 17, wherein there is one demodulator per customer as there is one RSPC per customer, col. 4, lines 30-42) transmitted with different standards (Hamlin, col. 3, lines 3-12).

Regarding claim 28, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 26, wherein said transmodulator device includes a switch (Hamlin, fig. 2, input to remodulator 104) adapted for receiving the reserved signals coming from the demodulators.

Regarding claims 29 and 30, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 28, wherein the transmodulator comprises a modulator (Hamlin, fig. 2, remodulator 104) for remodulating the output of said switch and a converter (also part of remodulator 104, prior to output from output

interface 59, Hamlin, fig. 2) for converting the frequencies of the final output into a predetermined channel (Hamlin, col. 3, lines 24-54).

Regarding claim 31, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 25, further comprising user control means (Nicholson, fig. 2, remote control 33), said control signals being generated by said user control means, said user control means being operatively connected to said sockets and adapted to generate digital upstream signals for transmission to said converting means and to convert their frequencies into the personal channels (Nicholson, col. 5, lines 51-55), and that second selection and handling means (Nicholson, transmit switch 14 in fig. 6) are provided for said digital signals in transmission (Nicholson teaches the selection means is used for communication of internal signals with outside sources, col. 6, lines 3-10), and means (Nicholson, col. 6, lines 3-10, CATV, SMATV, microwave or fiber optic link) for the transmission of said upstream signals from satellite or by cable.

Regarding claim 32, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 31, wherein the transmodulator means and said second selection means both operate respectively on downstream and upstream signals under SCPC procedure (wherein SCPC stands for single channel per carrier, and Nicholson teaches all upstream and downstream communications take place on

user allocated channels, col. 5, lines 4-25, wherein the individual channels are specific to particular frequency bands).

Regarding claim 33, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 32, wherein the upstream and downstream signals are simultaneously present in the same personal channel (Nicholson teaches the users personal channel is a 12 MHz band spit into a downstream band and an upstream band, thus upstream and downstream signals are simultaneously present in the same personal channel, col. 1, lines 22-27).

Regarding claim 34, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 33, wherein the upstream and downstream signals occupy frequency bands which do not overlap (Nicholson teaches upstream and downstream communication occur on simultaneously on two distinct TV channels, col. 1, lines 22-24).

Regarding claim 35, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 32, but fail to disclose the upstream and downstream signals are not simultaneously present in the same personal channel.

It is notoriously well known in to art to define channels using TDMA, as TDMA conserves bandwidth.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, Schubin, and Hamlin to use the personal channel un TDMA procedure, wherein under TDMA the upstream and downstream signals are not simultaneously present in the same personal channel, as TDMA is an effective means to increase the number of channels available on a given bandwidth, more efficiently utilizing said bandwidth.

Regarding claim 36, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 32, but fail to disclose the selection means and selection and handling means are housed in the same container.

Placement of physical devices in the same physical container is a convenient placement of hardware, as it is compact, and thus conserves space.

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Nicholson, Hoarty, Schubin, and Hamlin to place the first and second selection means in the same container for convenience and space conservation.

7. Claims 37-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson, Hoarty, Schubin, and Hamlin as applied to claim 31 above, and further in view of Saward (5,537,473, of record) and Diehl et al. (5,835,864, of record) [Diehl].

Regarding claim 37, Nicholson, Hoarty, Schubin, and Hamlin disclose the system of claim 31, but fail to disclose the user control means (Nicholson, office terminal 4 in fig. 4 is under control of remote control 33) comprise a smart card and a receiver adapted to access a plurality of conditioned access services by reading the information contained in said smart card, and that said information contained in said smart card controls the means for converting the frequencies of the received reserved digital signals in a personal channel.

In an analogous art, Saward discloses utilizing a smart card to control a receiver in allowing said receiver to receive conditional services by reading information stored in said smart card (col. 3, lines 1-30), providing a highly secure means by which customers may receive conditional access programming.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, Schubin, and Hamlin to include accessing a plurality of conditional access services by reading information contained in a smart card, as taught by Saward, for the benefit of providing a highly secure means by which customers may receive conditional access programming, as smart cards are unique to individual users and highly resistant to tampering.

Nicholson, Hoarty, Schubin, Hamlin, and Saward fail to disclose said information contained in said smart card further controls the means for frequency converting received reserved digital signals in the personal channel.

In an analogous art, Diehl teaches using information stored on a smart card (in EEPROM memory, col. 3, lines 3-6) to program frequency conversion means (col. 2 line 49 – col. 3 line 11), for the benefit of easily and dynamically programming receiver equipment according to the desired configuration of the users (col. 1, lines 50-62).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, Schubin, Hamlin, and Saward to include controlling the means for frequency converting received signals using information in said smart card, as taught by Diehl, for the benefit of easily and dynamically programming receiver equipment according to the desired configuration of the users, allowing the economic use of common receiver equipment at a plurality of sites.

Regarding claims 38-42, Nicholson, Hoarty, Schubin, Saward, and Diehl disclose the system of claim 37, wherein said information contained in said smart card comprises information for tuning the transmodulator means and transponder preselection means (Diehl teaches the information includes channel map information for proper tuning, col. 2 line 66 – col. 3 line 11, which would include information for proper tuning when the service is satellite television, one of the signal sources as disclosed by Nicholson, as shown in fig. 2).

Regarding claim 43, Diehl additionally discloses the information stored on the smart card is for the purpose of dynamically programming common receiver equipment so that it may properly tune to designated channels depending on how the equipment is implemented (col. 2 line 49 – col. 3 line 11), and such a teaching also applies to programming a receiver with the personal channel of a particular user (Nicholson, user allocated frequencies, col. 1, lines 22-24, col. 4, lines 30-36, and col. 5, lines 20-23).

It would have been obvious at the time to a person of ordinary skill in the art to further modify the system disclosed by Nicholson, Hoarty, Schubing, Saward, and Diehl to include in said information stored on said smart card, frequency information so said personal channel, as taught by Diehl, for the benefit of easily and dynamically programming receiver equipment according to the desired configuration of the users, allowing the economic use of common receiver equipment at a plurality of sites.

Regarding claim 44, Nicholson, Hoarty, Schubin, Saward, and Diehl disclose the system of claim 37, wherein the selection means and the smart card contain respective electronic keys, whose congruence enable the operation of said system (Saward teaches the smart card includes decryption keys, which are provided to reception equipment for decrypting signals to enable reception, col. 3, lines 20-27).

Regarding claim 45, Saward further discloses a device in a receiver (descrambler control circuit 22 in fig.3) which writes data in a program memory of a microprocessor contained in the smart card ("off-air" update to stored information, col. 3, lines 20-30), which enables broadcasters to dynamically maintain the information used by customers for accessing services.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclose by Nicholson, Hoarty, Schubin, Saward, and Diehl to include a device in said control means for writing data in a program memory of a microprocessor contained in the smart card, as taught by Saward, for the benefit of enabling broadcasters to dynamically maintain the information used by customers for accessing services, such as for billing purposes and a convenient means by which customers may upgrade their service.

Regarding claim 46, Nicholson, Hoarty, Schubin, Saward, and Diehl disclose the system of claim 48, wherein the program memory comprises an EEPROM type memory (Diehl, col. 3, lines 3-6).

Regarding claim 47, Nicholson, Hoarty, Schubin, Saward, and Diehl disclose the system of claim 45, wherein the device for writing data in a program memory of a microprocessor contained in the smart card operates on data by a modem (Nicholson teaches data communications are carried out using modems, col. 5, lines 38-44).

Regarding claim 48, Nicholson, Hoarty, Schubin, Saward, and Diehl disclose the system of claim 45, wherein the device for writing data in a program memory of a microprocessor contained in the smart card operates on data sent by means of service information contained in the received digital signal (the information being written to the smart card is service information, as they are customer access rights, as taught by Saward, and channel map information, as taught by Diehl).

8. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson, Hoarty, and Schubin as applied to claim 1 above, and further in view of Dufresne et al. (4,982,440, of record) [Dufresne].

Regarding claim 49, Nicholson, Hoarty, and Schubin disclose the system of claim 1, but fail to dislcose said band-stop filter means is adapted to prevent the passage of signals generated inside a further distribution network associated with a socket inside a dwelling.

In an analogous art, Dufresne teaches blocking upstream noise from entering a distribution network using a band-stop filter (low band bandpass filter 16 shown in fig. 4, see col. 7 line 60 – col. 8 line 12).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Hoarty, and Schubin to include said band-stop filter means is adapted to prevent the passage of signals

generated inside a further distribution network associated with a socket inside a dwelling, as taught by Dufresne, for the benefit of blocking upstream noise from entering the distribution network.

Conclusion

9. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D. Saltarelli whose telephone number is (571) 272-7302. The examiner can normally be reached on Monday - Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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